Application No. 09/695,809
SD-6337 S-92,307

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims:

1. (Currently Amended) A video display system for displaying ~~on a display medium~~ an image on a display medium, ~~wherein the image comprises a first portion to be displayed at a first resolution and a second portion, mobile with respect to the first portion, to be displayed at a second resolution,~~ comprising:

    a) ~~a~~ first video source means mounted relative to the display medium for displaying a first portion of the image at a first resolution;

    b) ~~a~~ second video source means mounted relative to the first video source means and the display medium, for displaying a second portion of the image at a second resolution, said second portion comprising a subset of the first portion, said second portion overlaying said first portion;

    c) ~~means for moving the position of said second portion with respect to said first portion; and,~~ an image transformer for generating an input to the second video source means such that the second video source means displays the second portion aligned with the first portion ~~displayed by the first video source~~.

2. (Currently Amended) The video display system of Claim 1, wherein the second video source means comprises a video driver and an ~~video~~ image steerer means for directing optical energy from the video driver to the display medium. ~~, mounted with the video driver to direct optical energy therefrom to the display medium.~~

3. (Currently Amended) The video display system of Claim 2 ~~1~~, wherein the first video source means comprises a first projector, and said ~~the second~~ video driver ~~source~~ comprises a second projector, ~~and an~~ said image steerer means being mounted relative to the second projector ~~with the projector to direct optical energy therefrom to the display medium~~.

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4.   (Currently Amended) The video display system of Claim 3, wherein ~~the~~ said image steerer

means comprises a mirror capable of pan and tilt motion.

~~capable of pan ad tilt motion.~~

5.   (Currently Amended) The video display system of Claim 4, wherein the pan and tilt motion

of ~~the~~ said mirror is controlled by a computer.

6.   (Canceled)

7.   (Currently Amended) The video display system of Claim 1, wherein ~~the~~ said image

transformer comprises a homogeneous transform.

8.   (Currently Amended) A method ~~of~~ for displaying ~~on a display medium~~ an image on a

display medium comprising: ~~wherein the image comprises a first portion to be displayed at~~

~~a first resolution and a second portion, mobile with respect to the first portion, to be~~

~~displayed at a second resolution, comprising:~~

a)   ~~displaying~~ with a first video source ~~the~~ a first portion of the image at a first resolution ~~on~~

~~the display medium;~~

b)   ~~configuring~~ displaying with a second video source ~~so that its output corresponds to the~~ a

second portion of the image at a second resolution, said second portion being a subset of

the first portion, overlaying and being movable over said first portion; ~~display medium~~

~~corresponding to the second portion;~~

c)   ~~generating an input to the~~ providing an output from said second video source, that

corresponds to the subset of the first portion of the display overlaid by the second portion,

said output being compensated for the relative configurations of the first video source, the

second video source, and the display medium, whereby the second portion is aligned with

the first portion. ~~compensated for the relative configurations of the first video source, the~~

~~second video source, and the display medium.~~

9.   (Currently Amended) The method of Claim 8, wherein the input to the second video source

is compensated according to a transform ~~determined by~~ comprising:

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a)———determining a first image plane transform by determining a correlation between an image

plane corresponding to the first video source and the display medium;

b)———determining a plurality of image plane correlations between the display on the display

medium of the image plane corresponding to the first video source and an image plane

corresponding to the second video source, each correlation corresponding to a

configuration of the second video source;

c)———determining a second image transform as a function of the configuration of the second

video source from the first image plane transform and the image plane correlations.

10.   (Currently Amended) The method of Claim 9, wherein:

a)———the plurality of image plane correlations has sufficient number that the number of unknown

parameters in the second image transform is less than the number of equations resulting

from the image plane correlations; and

b)———the second image transform is determined from a linear regression on the image plane

correlations.

11.   (Currently Amended) A method of determining an image transform for registration of first

and second images to be displayed on a display medium, wherein the second image can

be displayed at various locations relative to the first image by changing the configuration of

a second video source, wherein the display of the first image has an associated first image

plane and the display of the second image has an associated second image plane,

comprising:

a)———determining a first image plane transform by determining a correlation between the first

image plane and the display medium;

b)———determining a plurality of image plane correlations between the display on the display

medium of the first image plane and the second image plane, each correlation

corresponding to a configuration of the second video source;

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c)——determining the image transform as a function of the configuration of the second video

source from the first image plane transform and the image plane correlations.

12.   (Currently Amended) The method of Claim 11, wherein:

a)——the plurality of image plane correlations has sufficient number that the number of unknown

parameters in the image transform is less than the number of equations resulting from the

image plane correlations; and

b)——the image transform is determined from a linear regression on the image plane

correlations.

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